



2nd International Conference on Quaternary Sciences Gorgan, Iran; 5 – 7 September 2021. 3 days

Conference Program

Day 1

Sunday, Sept. 5th 2021

11:00-11:30 (Iran Time)

Opening Ceremony

Holy Quran and National anthem

Farhad Khormali, Scientific Secretary, Gorgan University of Agricultural Sciences and Natural Resources

Ali Najafinejad, President, Gorgan University of Agricultural Sciences and Natural Resources

Fariborz Gharib, President, Iranian Quaternary Association

Fahu Chen, Director, Institute of Tibetan Plateau Research, Chinese Academy of Sciences

Manfred Frechen, Acting Director, Leibniz Institute for Applied Geophysics, Germany

11:30-16:10

Session 1: Climate Change and Extreme Events

Conveners: Mahyar Mohtadi, Peter Ernest Wigand

11:30-11:50	Forcing and feedback mechanisms of rainfall on centennial to millennial timescales	Mohtadi Mahyar
11:50-12:10	Can Past Holocene climates and environments be used as analogs for predicting future environmental responses to global warming?	Wigand P., Zahabnazouri S.
12:10-12:30	The Late Quaternary Environmental changes in Iran	Azizi Ghasem
12:30-12:50	Quantitative estimates of Holocene glacier meltwater variations on the Western Tibetan Plateau	Hou J., Li C., Wang M., Liu W.
12:50-13:10	Speleothems: a Quaternary archive of hydroclimate change in Iran	Soleimani M., Carolin S.A., Nadimi A., Spötl C.

13:10-13:30

Break

13:30-13:50	Massive dust plumes over West Asia during North Atlantic cold events revealed by a dust record from southeastern Iran	Safaierad R., Mahyar Mohtadi M., Zolitschka B., Yokoyama Y., Christoph Vogt Ch., Schefu B.E.
13:50-14:10	Evaluation of the applicability of four global grid precipitation datasets in Iran and analysis of Iran's modern precipitation features	Ma S., Li C., Xie T., Chen J., Chen F., Huang W.
14:10-14:30	Persian Gulf Holocene sedimentary environment based on two cores in shallow part of Bandar Abbas and Bushehr	Lak R., Behbahani R.



14:30-14:50	The potential of small mountain river systems for paleoenvironmental reconstructions in drylands – an example from the Binaloud Mountains in northeastern Iran	Khosravichenar A., Fattahi M., Amini H., Suchodoletz H.V.
14:50-15:10	Environmental Changes in Lakes of Iran in Anthropocene epoch (Case study: Gavkhuni Swamp)	Akbari Azirani T.

15:10-15:30 Break

15:30-16:0 POSTER SESSION

Landscape evolution in the northeastern Iranian Plateau reconstructed from Late Pleistocene to Holocene sediment archives – a project outline	Büdel Ch.; Fuchs M., Baumhauer R.
Arctic Oscillation Modulates climate over Northeast Iran	Azarmdel H. et al.,
Paleoclimate and Palaeoenvironment of the Central Zagros (Case study; Hashilan marsh)	Rostami H., Azizi G., Darabi H., Richter T., Ruter A.H., Maleki S.
Climate Change and Extreme Events in Urmia Lake	Javan Kh., Khaledi Sh., Yahyavi A., Akbari Azirani T.
Clay mineralogy of the sediments in Sabzevar playa, NE Iran; implication for the late quaternary climate changes	Pourali M., Mahmudy Gharaie M.H., Sepehr A.
Climate changes and Evidences of dry and wet periods during the quaternary in central Iran	Sharifi Paichoon M.
A high-resolution paleoclimate record from SE Iran reveals extreme sensitivity of West Asia to temperature changes since the Little Ice Age	Safaierad R., Noorollahi D., Schefuß E., Zolitschka B., Yokoyama Y., Vogt Ch., Hahn A., Mohtadi M.
The increase in the organic matter in MIS2 and changes in water levels (study area: Hashilan marshland)	Hosseinifard S.M., Azizi Gh., Rostami H., Zamanzadeh M.
Holocene moisture variation in West Asia recorded by Almalou Peatland	Chen S., Chen J., Hou J., Azarmdel H., Khormali F., Chen F.
Climate variability analysis for evolution effect over the Garmsar Alluvial fan, Based on field measurements	Zare Gh., Shayan S.

16:10-18:10 Session 2: Neotectonic and Active Faults
Conveners: Mohammad Reza Ghasemi, Richard Walker

16:10-16:30	Luminescence dating overview; basics, sample collection to age determination.	Fattahi M.
16:30-16:50	Active faulting, earthquakes, and geomorphology of the Main Kopeh Dagh fault, Turkmenistan	Walker R., Begenjev G., Bezmendov Y., Dodds N., Grutzner C., Marshall N., Mousavi Z., Rhodes E.
16:50-17:10	Quaternary geology, active tectonics and urban development of the Tehran city	Ghassemi M.R., Salamat F.



17:10-17:30	Changing the motion of Ladar fault during Quaternary, Khur area, Central Iran	Ebrahim S., Nadimi A.
17:30-17:50	Active tectonics along the Khazar fault (Alborz, Iran)	Nazari H., Ritz J.F., Burg J.P., Shokri M.A., Haghypour N., Mohammadi Vizheh M., Avagyan A., Fazeli Nashli H., Ensani M.R., Maleki S.
17:50-18:10	Active tectonics of the Kalabagh Fault in Pakistan: implications from morphotectonics and luminescence dating	Abbas W., Zhang J., Tsukamoto S., Ali S., Frechen M., Reicherter K.



Day 2

Monday, Sept. 6th 2021

11:00-13:30

Session 3: Human Dispersal and Adaptation

Conveners: Hamed Vahdatinasab, Guanghui Dong

11:00-11:20	Middle Pleistocene Cave of Qaleh Kurd: the oldest human occupation in IRAN	Vahdati Nasab H., Berillon G.
11:20-11:40	Climate change and Silk Road civilization in the arid central Asia	Chen F., Chen J., Dong G., Huang W., Hou J., Wang T.
11:40-12:00	The Effects of the Southern Zagros Folded Zone on the Adaptive Strategies of the Late Pleistocene Human Occupations in Fars Province	Zeidi M.
12:00-12:20	The Caspian Sea shoreline climatic events during the Holocene Period and its relationship with the rise and fall of civilization	Fazeli Nashli H.
12:20-12:40	New evidence of Late Pleistocene hominin occupations in the Southern Caspian Sea Corridor	Ghasidian E., Ramzanpour H., Moradian M., Heydari-Guran S.
12:40-13:00	3-D Geometric Morphometrics in the Paleolithic Archaeology of Iran; The Northern Iranian Central Desert	Hashemi S.M., Vahdati Nasab H., Berillon G.

13:00-13:30

POSTER SESSION

Stages of loess accumulation of the multilayer Kulbulak Palaeolithic site (Uzbekistan)	Kurbanov R.N., Pavlenok K.K., Pavlenok G.D., Taratunina N.A.
The Paleolithic cave of Qaleh Kord (Qazvin, IRAN): geoarchaeological study by using micromorphology and physical-chemical analysis	Kharazian M.A., Antoine P., Bahainc J.J., Galletc X., Hashemi M., Jamet G., Puaud S. Vahdatinasab, H., Berillon, G.
Reconstruction of mid-Holocene human and environmental dynamics on the Varamin Plain	Busch R., Kirsten F., Schütt B., Bernbeck R., Pollock S., Rol N., Hessari M.
Asynchronicity of dietary transformation in different regions along the Bronze Age Eastern Silk Road	Ma M., Wei W., Wang Y., Dong J., Chen G., Sun F., Li H., Dong G.
The dating evidence for the earliest domesticated cattle and sheep/goats and pastoralism history in Gansu-Qinghai regions, NW China	Ren L., Qiu M., Yang Y., Chen G., Dong G.
Current status of Epipalaeolithic studies in South-Easter Caspian Sea	Shnaider S.V., Kurbanov R., Alisher kyzy S., Shangina M.V.
How did Humans Adapt in the Eastern Farming-pastoral zone during the Medieval Warm Period?	Xin Jia
The diffusion of animal husbandry in Eurasia and its influence on Hexi Corridor, NW China	Du L., Dong G.

13:30-14:00

Break



14:00-16:30

Session 4: Loess as a Quaternary Archive

Conveners: Martin Kehl, Xin Wang

14:00-14:20	Aeolian records in the Southern Caspian Lowlands, Iran – an overview	Kehl M., Frechen M., Khormali F.
14:20-14:40	Early Pleistocene climate in north Iran and its correlation with Eastern Asia	Wang X., Khormali F., Wei H., Wang Q., Taheri M., Kehl M., Frechen M., Chen F.
14:40-15:00	Lower Volga loess-paleosol sequences	Kurbanov R., Murray A., Yanina T., Stevens T., Belyaev V., Makeev A., Lebedeva M., Taratunina N., Költringer C.
15:00-15:20	Taman loess-paleosol sequence: structure, age, genesis	Timireva S., Kononov Y.U., Sycheva S., Kurbanov R., Murray A., Taratunina N.
15:20-15:40	New data on the structure of the loess-soil series of Tajikistan	Meshcheryakova O.A., Kurbanov R., Sosin P.M.
15:40-16:00	Paleoclimate implications from grain-size analysis of loess-paleosol sequences from the Carpathian Basin	Novothy A., Országh T., Varga G., Barta G., Csonka D., Végh T., Horváth E.

16:00-16:30

POSTER SESSION

Stratigraphy and Moisture Changes revealed from Iranian Loess-Paleosol in the Western Arid Central Asia since the Last Interglacial	Xie H., Wang X., Wang Q., Chen S., Hou J., Chen F.
Rock Magnetic records of Baluchabad Loess-Paleosol Sequences, Northern Iran	Amiri Z., Khormali F., Huxol J.D., Kehl M., Zeeden C., Rolf C., Frechen M.
Loess-paleosol sequence over 23,000 years ago in Gorgan	Maleki S., Azizi Gh., Khormali F., Kehl M., Frechen M., Shahbazi R., Rostami H.
Geochemical indicators of source area and weathering intensity for the loess-paleosol sequence of Neka-Abelou, Northern Iran	Maßon L., Kehl M., Opitz S., Khormali F.
Holocene moisture variations in western arid central Asia inferred from loess records from NE Iran	Wang Q., Chen J., Khormali F., Wang L., Xie H., Wang X., Huang W., Chen F.
Pedostratigraphy of the Kuban loess-paleosol sequences	Tokareva O., Timireva S., Kononov Yu., Lebedeva M., Kurbanov R., Meshcheryakova O., Taratunina N.
Application of landform planation index (LPI) in identifying planation surfaces and paleotopography of Gorgan loess plateau (northeast of Iran)	Latifi S.

16:30-17:00

Break



17:00-19:00

Session 5: Soil formation on Quaternary Landforms

Conveners: Alexander Makeev, Farhad Khormali

17:00-17:20	Pedogenetic response to climatic fluctuations within the last glacial-interglacial cycle in the Lower Volga basin	Makeev Alexander
17:20-17:40	Toward the understanding of (post)pedogenic processes behind the peaks and lows of commonly used climate proxies	Horváth E., Bradák B., Szeberényi J., Csonka D., Végh T., Novothny Á.
17:40-18:00	Modern pedogenesis on loess along a climate gradient in Northern Iran	Khormali F., Kehl M., Frechen M.
18:00-18:20	Influence of the composition and properties of Khvalynsk deposits on the evolution of soils and soil cover in the north-western part of the Caspian Lowland (based on the results of mineralogical and micromorphological studies)	Lebedeva M.P., Romanis T.V., Varlamov E.B., Churilin N.A., Makeev A.
18:20-18:40	Pedogenesis- a likely process to explain the magnetic properties of the of the Late Pleistocene loess-paleosol sequence at Chenarli, northeastern Iran	Ghafarpour A., Khormali F., Rolf Ch., Tazikeh H., Kehl M., Frechen M., Zeeden Ch.
18:40-19:00	Pedostratigraphy of the Kuban loess-paleosol sequences	Tokareva O, Lebedeva M., Timireva S, Kononov Yu., Taratunina N., Kurbanov R.

POSTER SESSION

Mineralogical and geochemical characteristics of vesicular horizons of desert soils in the Rayen region-Kerman	Rafieisarbijan H.R., Jafari A., Heidari A., Abbasnejad A.
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Day 3

Tuesday, Sept. 7th 2021

11:00-13:00

Session 6: Quaternary Evolution of the Caspian Sea and its Basin

Conveners: Hamid Alizade Lahijani, Recep Kurbanov

11:00-11:20	The Holocene events in the Caspian Sea	Yanina T., Sorokin V., Romanyuk B.
11:20-11:40	Impact of Climate change and Caspian Sea level fall on decline of Gorgan Bay	Lahijani H., Azizpour J., Abtahi B., Rhanama R., Hamzehpour A., Ghafarian P., Gholami S., Mohammadpour M.R.
11:40-12:00	Structure and chronology of the Chocolate clays facies of the Lower Volga	Kurbanov R., Murray A., Yanina T.
12:00-12:20	The role of the aeolian factor in the formation of the landforms of the Lower Volga region	Lobacheva D., Badyukova Ye.
12:20-12:40	Development of cryogenic processes as a factor in the loess formation in the Lower Volga valley	Taratunina N.A., Kurbanov R.N., Rogov V.V., Yanina T.A.

12:40-13:00

POSTER SESSION

Southeast Caspian coast evolution during Holocene	Badyukova Ye.
Age of the Khvalynian Strait in the Late Pleistocene History of the Manych Depression	Semikolennykh D., Kurbanov R., Murray A., Yanina T.
Luminescence chronology of the great Khvalynian transgression from the Kosika section (Lower Volga)	Kurbanov R., Murray A., Yanina T., Butuzova Ye.

13:00-13:30

Break

13:30-16:10

Session 7: Natural hazards (earthquakes, landslides, sinkholes and ...)

Convener: Reza Shahbazi

13:30-13:50	Climate change and its footprint on the geohazard amplification in Iran.	Shahbazi Reza
13:50-14:10	The analysis of Meteorological Parameters Influencing dust Genesis over the Middle East	Rahnama M., Sehatkashani S., Karami S., Attarchi S.



14:10-14:30	The spatial and possess analyses of piping and gully head erosions using unmanned aerial vehicles (UAV) images	Kariminejad N., Hosseinalizadeh M., Pourghasemi H.R., Rossi M., Ownegh M.
14:30-14:50	Subsurface erosion by soil piping – significance and consequences	Bernatek-Jakiel Anita
14:50-15:10	Geohazard aspects of Quaternary faulting within Tehran Region, NNW of Iran	Solaymani Azad Shahryar
15:10-15:30	Living on Quaternary Faults in Iran; High exposure problem in Earthquake Risk	Zare Mehdi
15:30-15:50	Soil erosion and its trend in Iran by comparing several case studies	Rezaei Khalil

15:50-16:10

POSTER SESSION

An overview of the Applications of Advanced Tools in Natural Hazard Studies in Iran	Kornejady A., Golijirandeh A., Alizadeh H., Samadi M., Karimi M., Alizadeh A., Haghanishirazi M., Abolhasani H., Hosseinalizadeh M. Nokhandan F., Horváth E.
Soil Erosion Susceptibility Mapping Using GIS and AHP Case Study Kalat-e-Naderi, Northeast Iran	
The effect of flood on soil degradation in Gorganrud River Basin	Mirzaeirad H., Kiani F., Khormali F., Najafinejad A.

16:10-16:40

Closing Ceremony

Total No. Abstracts: 78